



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,352	09/09/2003	Mark Smith	S0031/7001	2114

42532 7590 07/26/2007
PROSKAUER ROSE LLP
ONE INTERNATIONAL PLACE
BOSTON, MA 02110

EXAMINER

TRAN, PHUC H

ART UNIT	PAPER NUMBER
----------	--------------

2616

MAIL DATE	DELIVERY MODE
-----------	---------------

07/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/658,352		SMITH ET AL.	
	Examiner		Art Unit	
	PHUC H. TRAN		2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13, 14 and 16-18 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-12 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/12/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-5 and 11-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Regarding to claim 2, the steps of “receiving from the asynchronous switch the data packet at a destination and disassembling the data packet into subpackets” is not clear why the data packet received from asynchronous switch is disassembled into subpackets since the claim 1 disclose the step of constructing subpackets.

Since claims 3-5 and 11-12 are depended on claim 2, so they are also rejected under 112 second paragraph.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 6-8, 10, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Sakamoto et al. (U.S. Patent No. 6836479 B1).

- With respect to claim 1, Sakamoto teaches a method for processing data comprising: (a) converting a stream of synchronous serial data associated with a source time slot into a plurality of parallel data units (e.g. Fig. 1 shows the serial data to the parallel data in block 3-1); (b) constructing, during a synchronization interval, at least one subpacket in memory from the plurality of parallel data units (e.g. in Fig. 3 the packet is assembled at queue 15); (c) storing memory context information, including a destination time slot identifier, for each subpacket associated with the source time slot (e.g. the queue 15 with corresponding with output queue 25 and with time); (d) constructing a data packet in memory (e.g. queue 15 in Fig. 3), the data packet including at least one synchronization tag identifying the synchronization interval (e.g. flag in Fig. 16 for synchronization tag identifying), a plurality of subpackets, and the respective memory context information associated with each of the subpackets (e.g. each queue 15 in Fig. 3 associated with cells); and, (e) providing the data packet to a receiving mechanism (e.g. a block 4 in Fig. 7 cells received).

- With respect to claim 6, Sakamoto also teaches wherein the memory context comprises time slot identification data (e.g. Fig. 10 shows the timeslot).

- With respect to claim 7, Sakamoto discloses wherein the memory context comprises destination queue identification data (e.g. queue 25 is destination queue for data in Fig. 3).

- With respect to claim 8, Sakamoto teaches wherein the memory context comprises enable data for enabling a data stream (e.g. queue 15 in Fig. 3).

- With respect to claim 10, Sakamoto discloses wherein the asynchronous switch comprises a plurality of destination ports (e.g. output interface 4 in Fig. 7) and the packet further comprises data identifying to which of the destination ports the packet will be supplied (e.g. the switch transmit data to the output interface as destination ports which the packet will be supplied).

- With respect to claim 15, Sakamoto teaches method for processing data comprising: (a) providing an apparatus having synchronization logic and an asynchronous switch for routing synchronous signals among a synchronous network interface and an asynchronous network interface and synchronization logic (e.g. Fig. 3 shows the data input at the block 3 and connect to switch core 101); (b) receiving a plurality synchronous serial data streams each from a different source time slot (e.g. Fig. 6, and 10 show the time chart for each source); (c) constructing a data packet from a plurality of subpackets each derived from one the synchronous serial data streams and a respective memory context associated with each subpacket (e.g. Fig. 3 shows at the block 3 and queue 15); and (d) routing the packet through the asynchronous switch to one of the asynchronous network interface and the synchronous network interface (e.g. routing cells from block 3 to switch core 101 in Fig. 3).

Allowable Subject Matter

5. Claims 13-14 and 16-18 are allowed.

The following is an examiner's statement of reasons for allowance: Claims are allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose a method for processing data comprising: (a) receiving a data packet comprising a plurality of subpackets and ingress context data associated with multiple source time slots, the subpackets within the data packet completed within a synchronization interval, the data packet further comprising i) at least one synchronization tag identifying the synchronization interval, and ii) data identifying the number of subpackets contained in the packet; (b) writing a subpackets into one of a plurality of playout buffers within an egress memory based on context data associated with the subpacket; (c) writing the subpacket to a position within one of the plurality of playout buffers in accordance with the synchronization interval identified by the synchronization tag plus a fixed address offset; and (d) sequentially reading the subpackets from the playout buffer.

Claims 2-5 and 11-12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Isukapalli et al. (U.S. Patent No. 7126957) discloses media flow method for transferring real-time data between asynchronous and synchronous networks.

Moriwaki et al. (U.S. Patent No. 6507584) discloses ATM switch.

Moriwaki et al. (U.S. Patent No. 6999413) discloses packet switching apparatus.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHI PHAM can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phuc Tran
Assistant Examiner
Art Unit 2616

P.t
7/22/07


CHI PHAM
SUPERVISORY PATENT EXAMINER

7/23/07